



**Florida Department of Environmental Protection**

# **Florida Department of Environmental Protection (FDEP) Update on BMAPs in the South Florida Water Management District**

**Thursday, August 6, 2015**





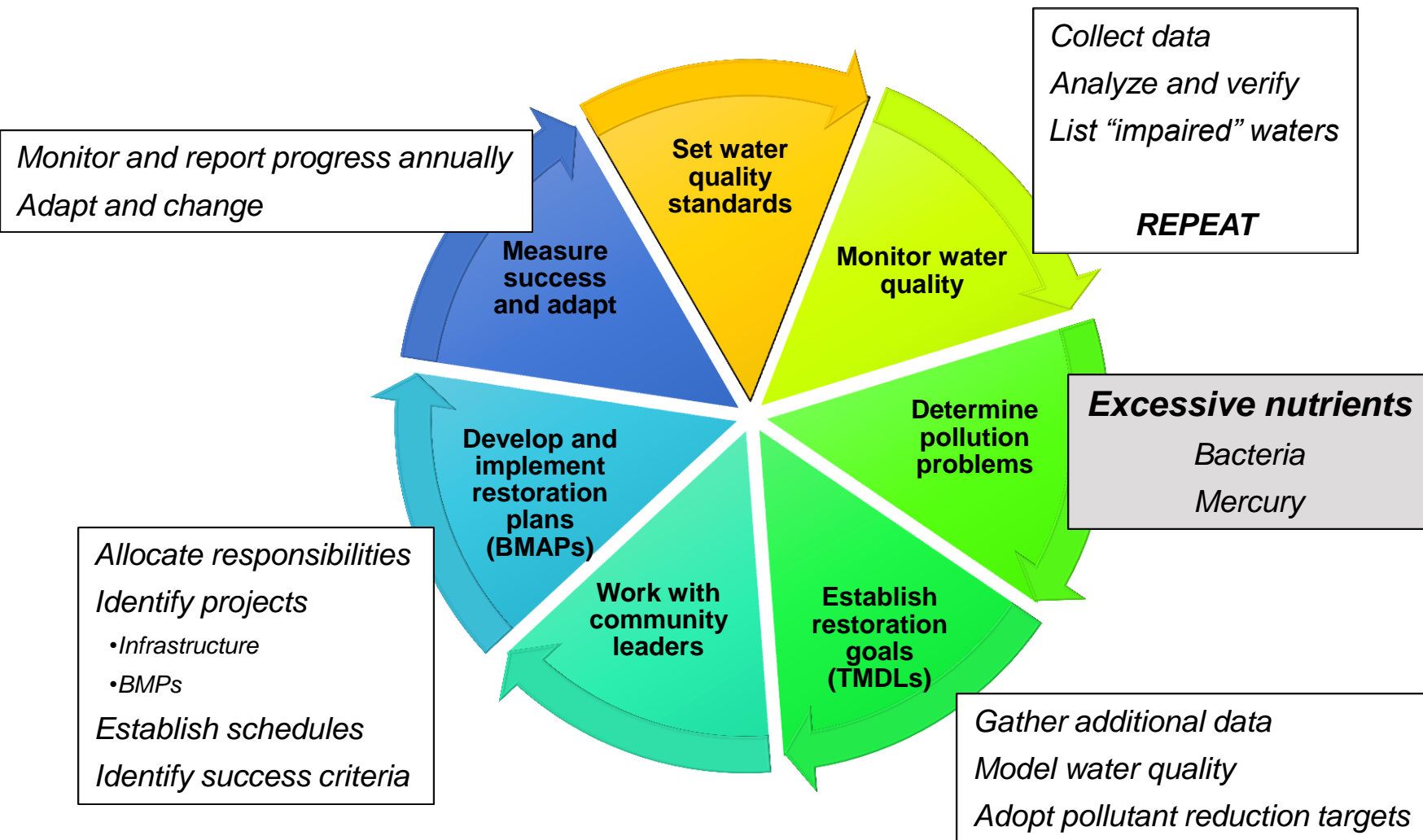
# Presentation Overview

- Water Quality Assessment and Implementation Framework
- Basin Management Action Plans
  - Caloosahatchee Estuary
  - Everglades West Coast
  - Indian River Lagoon
  - St. Lucie River and Estuary
  - Lake Okeechobee Watershed





# Water Quality Framework





# Basin Management Action Plan

- DEP's method for restoring water quality in an impaired water body.
- BMAPs are:
  - Developed with stakeholder input
  - Adopted by DEP through a Secretarial Order
  - Enforceable
  - Implemented through a phased approach
  - Reviewed annually



# Agriculture and BMAPs

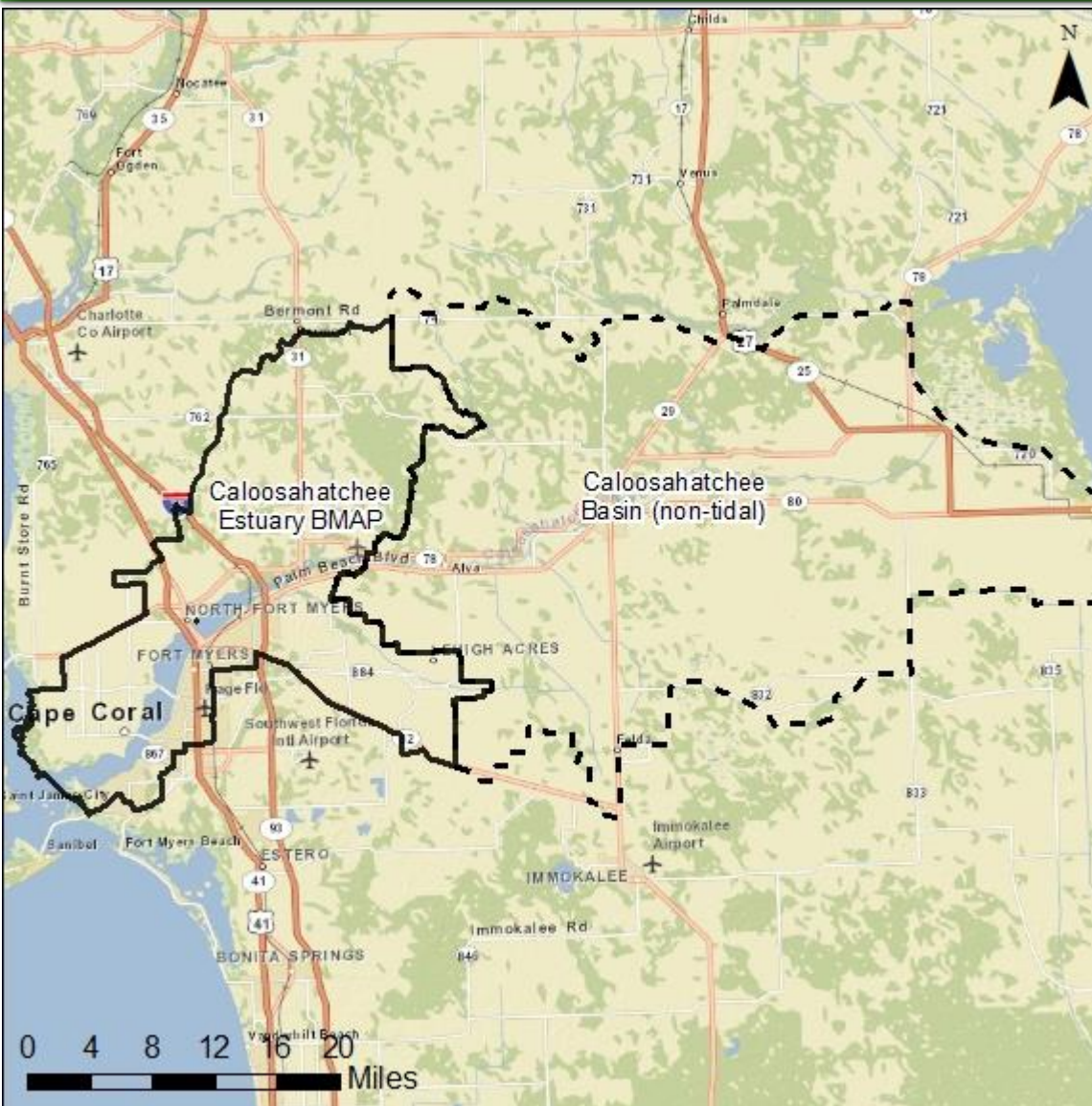
- Agricultural producers within a BMAP:
  - Enroll in Florida Department of Agriculture and Consumer Services (FDACS) Best Management Practices (BMPs);  
or
  - Monitor Water Quality
- Benefits of FDACS enrollment:
  - Presumption of Compliance
  - Eligibility for cost-share funding
  - Technical assistance
  - Improved Water Quality



# Regional Adopted BMAPs

- Caloosahatchee Estuary BMAP (Nov 2012)
- Everglades West Coast BMAP (Nov 2012)
  - Hendry Creek
  - Imperial River
- Indian River Lagoon BMAP (Feb 2013)
  - Banana River Lagoon
  - North Indian River Lagoon
  - Central Indian River Lagoon
- St. Lucie River and Estuary BMAP (May 2013)
- Lake Okeechobee BMAP (Dec 2014)





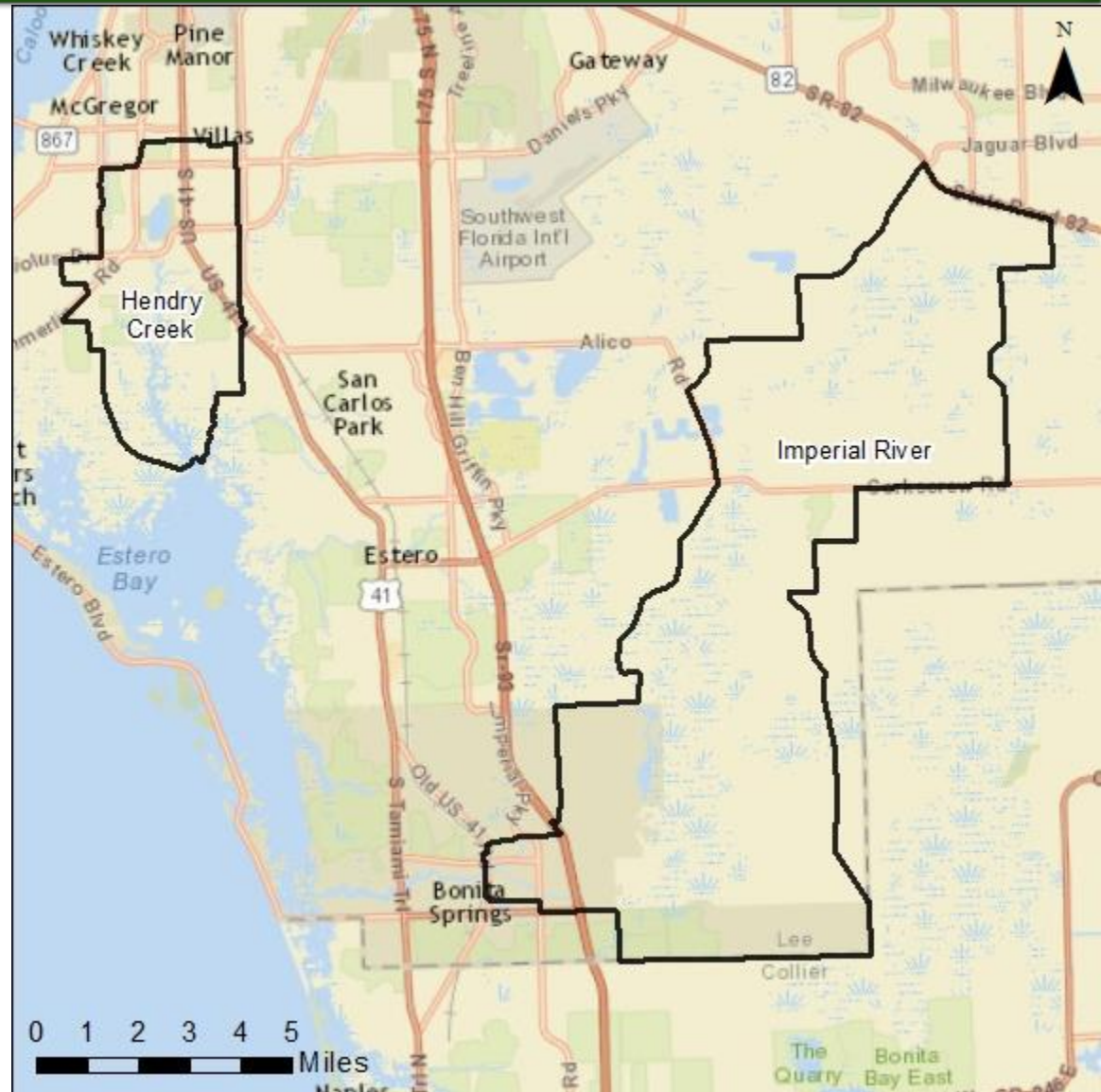
# Caloosahatchee Estuary

- BMAP adopted November 2012
- Implements TMDL for the tidal portion of the Caloosahatchee River Basin.



# Everglades West Coast

- BMAP adopted November 2012
- Implements TMDLs for Hendry Creek and Imperial River

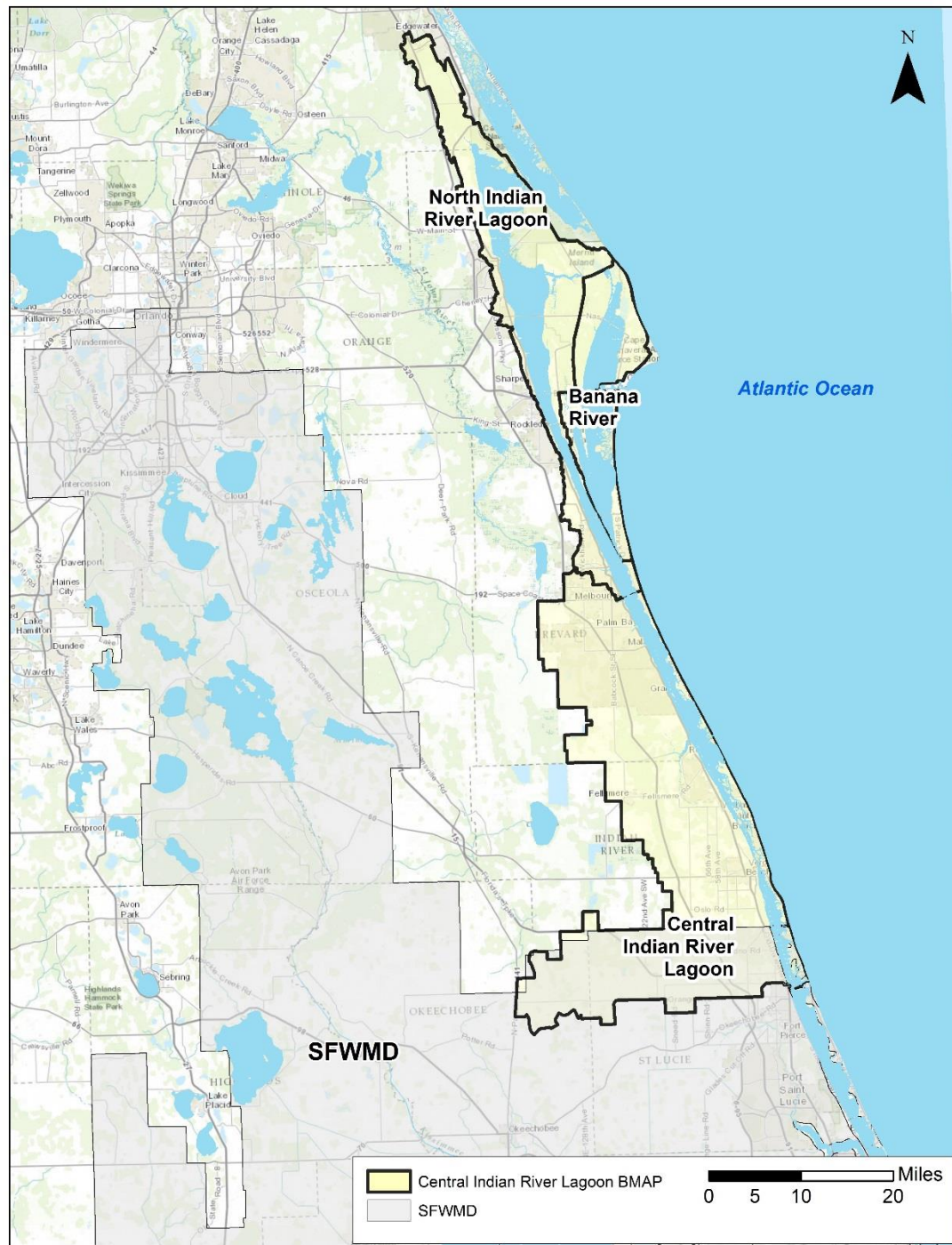






# Indian River Lagoon (IRL)

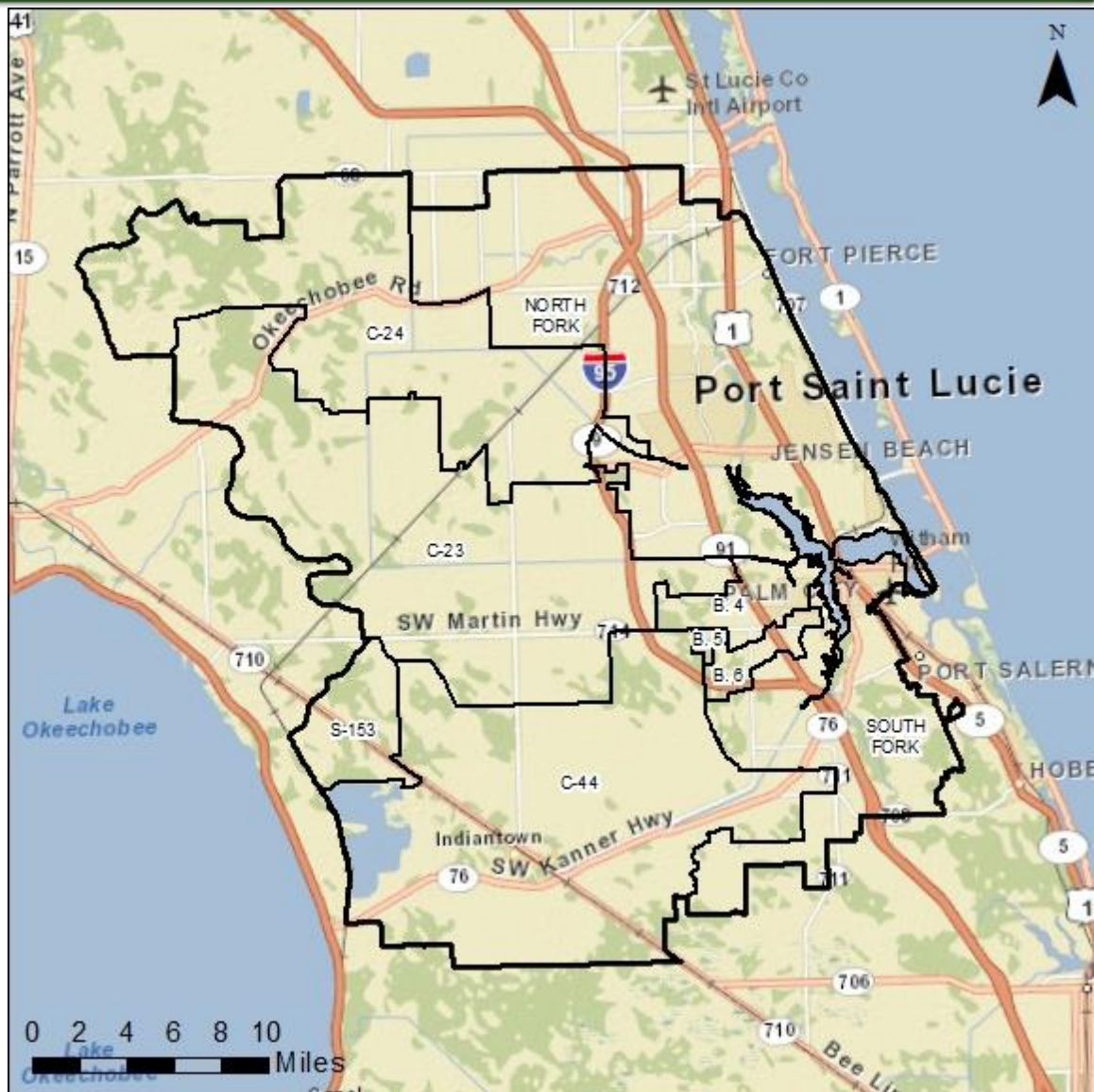
- BMAPs adopted February 2013
- “IRL BMAP” is actually three BMAPs
  - North Indian River Lagoon
  - Banana River Lagoon
  - Central Indian River Lagoon



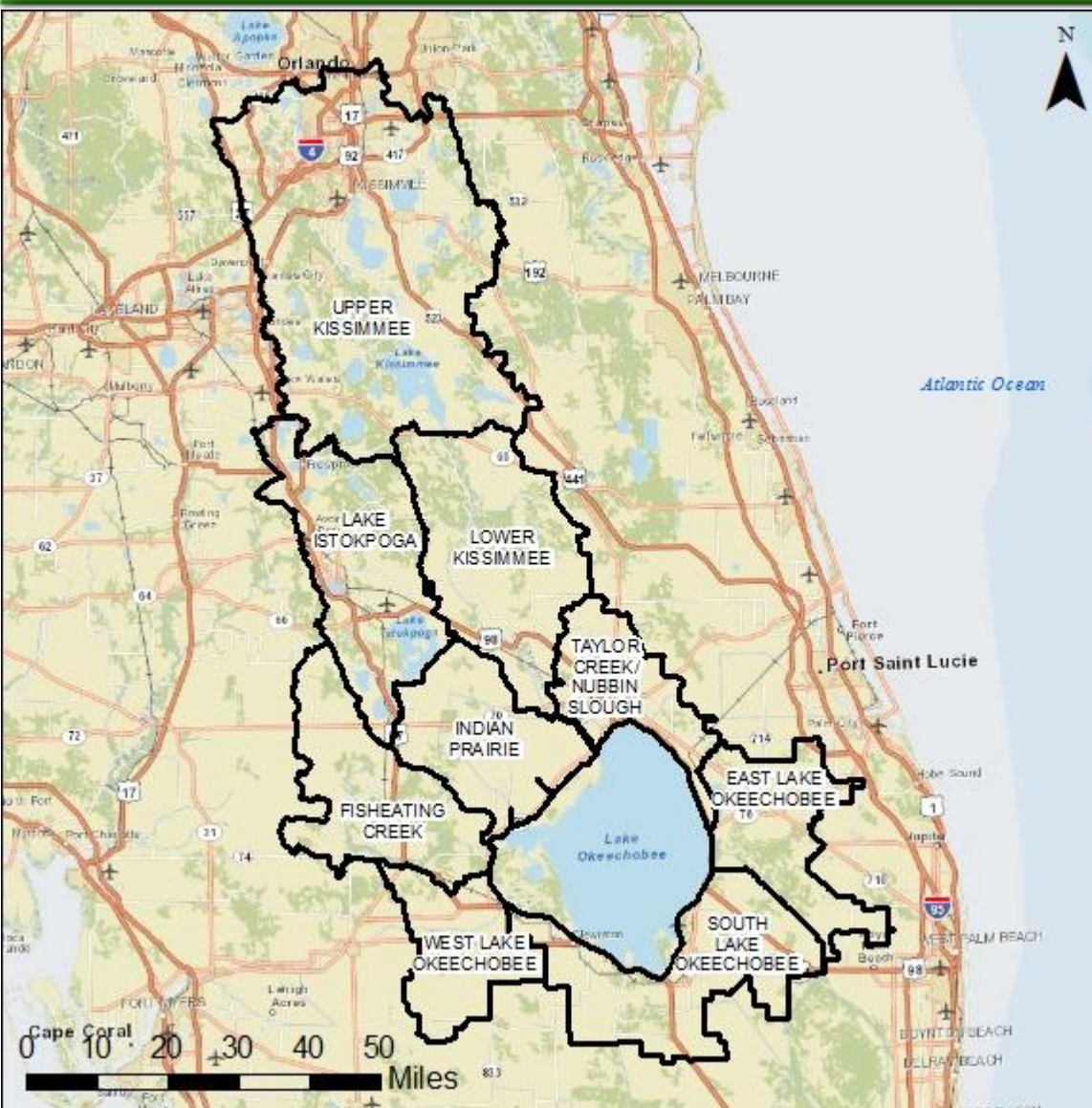


# St. Lucie River and Estuary

- BMAP adopted in June 2013
- Aims to achieve reductions in Total Nitrogen and Total Phosphorus







# Lake Okeechobee

Phase I of the BMAP focuses on project implementation in the six sub-watersheds north of Lake Okeechobee.

- Upper Kissimmee
- Lower Kissimmee
- Lake Istokpoga
- Indian Prairie
- Fisheating Creek
- Taylor Creek/Nubbin Slough



# Lake Okeechobee BMAP

## Summary of Estimated Reductions

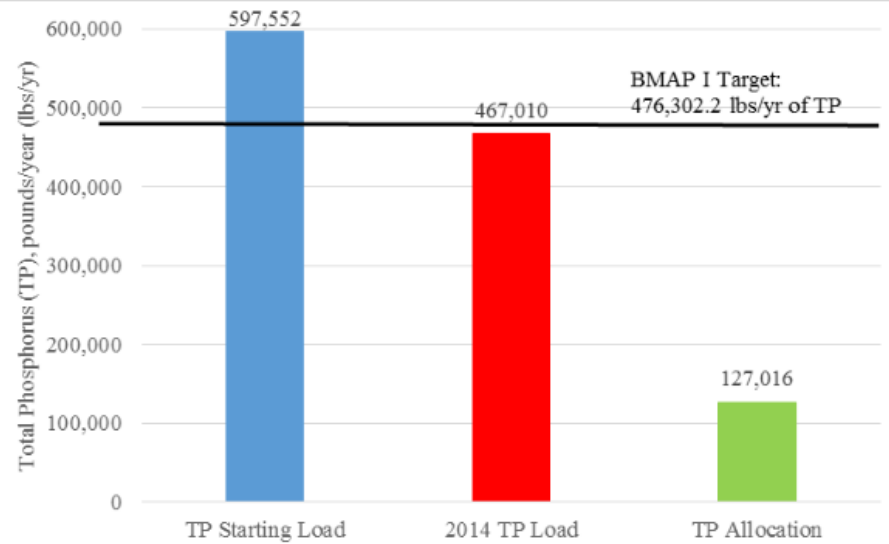
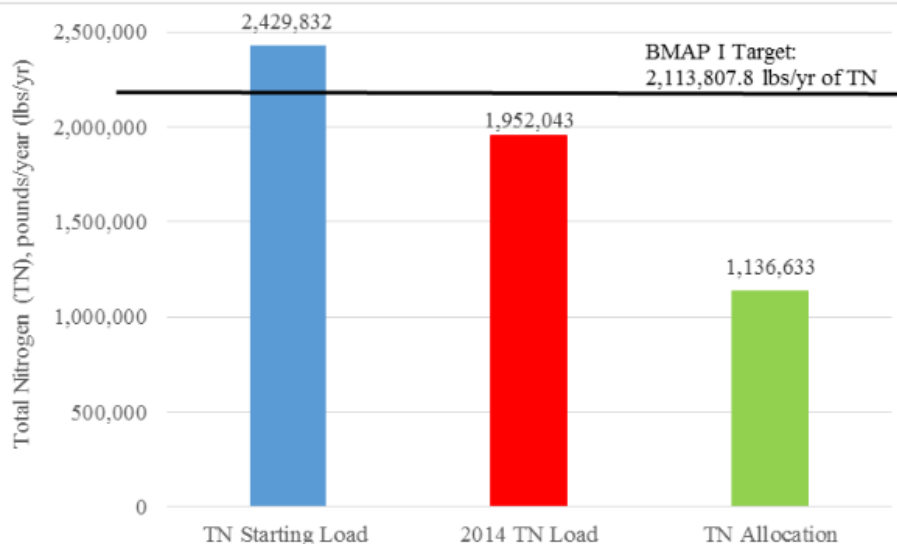
CATEGORY	TP REDUCTION (MT/YR)
Existing Load*	448
Reductions Needed to Achieve TMDL (105 MT/yr**)	343
Total Reductions Achieved	100
Projects Under Development with Coordinating Agencies	46 - 48
Total Reductions	145 -148 (42% +/-)
Total Reductions Remaining To Meet TMDL	195 -197

\*The existing load is the long-term average as calculated with the WAM load estimation tool. This is calculated using information only for the six northern sub-watersheds, although the TMDL applies to all nine sub-watersheds.

\*\*The 105 MT/yr applies to all of the sub-watersheds and is not an allocation to any collection of sub-watersheds.



# Making Progress



Progress Towards  
the St. Lucie River and Estuary  
**Total Nitrogen (TN) TMDL**  
through June 30, 2014

Progress Towards  
the St. Lucie River and Estuary  
**Total Phosphorus (TP) TMDL**  
through June 30, 2014

More information on the BMAP webpage:

<http://www.dep.state.fl.us/water/watersheds/bmap.htm>





# FDEP BMAP Contacts

David Glassner, (850) 245-8343 [David.Glassner@dep.state.fl.us](mailto:David.Glassner@dep.state.fl.us)

- St. Lucie River and Estuary

Sara Davis, (850) 245-8825 [Sara.C.Davis@dep.state.fl.us](mailto:Sara.C.Davis@dep.state.fl.us)

- Lake Okeechobee
- Caloosahatchee Estuary
- Everglades West Coast

Yesenia Escribano, (850) 245-8446 [Yesenia.Escribano@dep.state.fl.us](mailto:Yesenia.Escribano@dep.state.fl.us)

- Indian River Lagoon